

Appendix A – The drivers of gamification in the literature

Author	Drivers						
	Enhancing Motivation	Autonomy / Control	Personalized Experience	Clear Goals or Progress	Sense of Community	Challenges	Competition
# of studies	52	10	7	19	23	17	27
(Clarke et al., 2017)	x			x	x	x	
(Lee et al., 2017)							
(Ahmed, Kevan A. Buckley, Robert Moreton, & Adel Elmaghraby, 2016)							
(Sodhi, Girouard, & Thue, 2023)							
(Bucchiarone, Bertoldo, & Favargiotti, 2021)	x			x		x	x
(Gicquel et al., 2019)	x			x	x	x	
(Beutelspacher, Mainka, & Siebenlist, 2018)							
(Vicens et al., 2018)	x		x	x		x	x
(Bousios, Gavalas, & Lambrinos, 2017)	x						x
(Gabriel & Schmölzer, 2022)	x			x		x	
(Schell & Kaufman, 2016)							
(Bu, Liu, & Zhang, 2023)							
(Sampaio, Morgado, & Barbosa, 2012)	x						x
(Sun, Liu, & Lu, 2023)							
(Fang & Cho, 2020)							
(Kongeseri & Coley, 2019)	x	x			x	x	
(Bossavit & Parsons, 2016)	x						x
(Dargan & Evequoz, 2015)	x				x		x
(De Francisco et al., 2024)	x	x		x	x		
(Pflanzl, Classe, Araujo, & Vossen, 2017)							
(Becker, Ksenia Koroleva, Diogo Vitorino, & Novak, 2019)	x		x		x	x	x
(Iacovides, Jennett, Cornish-Trestail, & Cox, 2013)					x		
(Rehm, Foth, & Mitchell, 2018)	x			x	x		x
(Jin & Zhao, 2021)	x			x		x	x
(Avolicino et al., 2022)							
(He & Zhang, 2022)							
(Foxman & Forelle, 2014)	x						x
(Peischi, Schanti, & Holzinger, 2014)			x	x	x		x
(Thiel & Lehner, 2015)	x			x	x	x	x
(Minge et al., 2014)	x					x	x
(N. Prestopnik & Souid, 2013)	x						
(Mendez et al., 2019)	x		x	x		x	
(Y. Li & Wang, 2023)							
(Hassan & Hamari, 2020)	x						x
(Latifi, Monfared, & Khojasteh, 2022)	x				x		x
(Sergeyeva, Bogomiagkova, Orekh, & Kolesnik, 2020)	x						
(Fernandes & Junior, 2016)	x						
(Hassan & Nader, 2016)	x						
(Ortet, Costa, & Veloso, 2021)	x						
(Redondo, Giménez, Navarro, & Fonseca, 2020)	x			x	x	x	
(Ronzhyn, Wimmer, Viale Pereira, & Alexopoulos, 2020)			x				
(Resek et al., 2024)	x				x		x
(Hassan & Hamari, 2019)	x						x
(Bowser et al., 2014)	x	x					x
(N. R. Prestopnik & Crowston, 2011)	x				x		
(Martis, Bassano, Solari, & Chessa, 2017)	x						
(Hassan, 2017)	x	x			x		
(Wang, Cho, & Scheller-Wolf, 2021)							
(Quecke & Mariani, 2021)	x				x		
(Ai, Meng, Li, & Liu, 2023)							
(Eveleigh et al., 2013)	x		x			x	x
(Haase & Loebel, 2023)							
(Thiel, 2015)	x						x
(Bhéreux-Lagounaris, 2016)	x	x			x		
(Gastil & Broghammer, 2021)	x				x		x
(Zuo et al., 2023)							
(Vanolo, 2019)					x		
(Tennent, Pantidi, & Benford, 2016)	x	x			x		
(Thiel, Reisinger, Röderer, & Fröhlich, 2016)	x			x			x
(N. R. Prestopnik & Tang, 2015)	x	x					
(Anastasopoulou, Kokolakis, & Andriotis, 2017)							
(Torres-Toukourmidis, Romero-Rodríguez, Aguaded, Pérez-Rodríguez, & Sandoval, 2017)	x	x	x	x		x	x
(Liang et al., 2024)							
(Scherer, Wimmer, & Schepers, 2012)	x						
(Xu & Zheng, 2024)							
(Liu, Dong, An, & Guo, 2021)							
(Padilla-Zea et al., 2022)	x					x	
(Chian, 2023)	x				x	x	
(Moreira, Ferreira, Escudero, Pereira, & Duraao, 2020)	x	x		x			x
(Abdollahian et al., 2013)	x						
(Romero-Hernandez, Gonzalez-Riojo, Diaz-Faes-Perez, & Manero-Iglesias, 2018)	x			x			
(Willis & Parnington Manik, 2022)							x
(X. Li, Wu, Xie, & Wang, 2023)							
(Wagner & Minge, 2015)	x						
(Hantke et al., 2018)	x			x			x
(Palacin-Silva et al., 2018)	x				x	x	x
(Gastil, 2023)	x			x	x		
(Briones et al., 2018)	x	x		x			